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AN ANCESTRAL CROCODILE

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Pending the publication of detailed studies now in course of preparation, the following preliminary notice gives the essential characters that distinguish a new family of reptiles:

The characters taken from a fairly complete skeleton qualify this form to be in the line of ancestry of the crocodiles.

The specimen was collected by the author fifteen miles northeast of Cameron, Arizona, during 1931, in the highly colored red beds that have been described by Gregory¹ as a part of the Chinle.

This particular horizon I am designating in a later discussion as near the base of the Upper Triassic, as I am of the opinion the Triassic in Arizona is of tripartite division.

ARCHAEOSUCHIDAE, new family

FAMILY CHARACTER.—Pubis forming part of acetabulum, but nearly excluded. *Archaeosuchus richardsoni* = new genus and species.

TYPE.—A. M. N. H. No. 3024. An articulated skeleton nearly complete.

HORIZON.—Base of Upper Triassic.

LOCALITY.—Fifteen miles northeast of Cameron, Arizona.

GENERIC AND SPECIFIC CHARACTERS.—Body of medium size with dermal and ventral armor; dorsal scutes in two median rows covering vertebrae and upper ends of ribs. Ventral scutes in several rows. Tail completely armored. Head short, with medium-sized supratemporal fenestra. Orbits large, laterally placed. Nose pointed. Teeth sub-conical, in sockets. Palate bridged anteriorly. Vertebrae amphiplatyan; two vertebrae in sacrum. Ribs double-headed, posterior dorsal ribs articulating with transverse processes. Pectoral girdle with coracoid elongate and pierced. Clavicles cartilaginous, interclavicle long, rod-like. Limbs typically crocodilian. Carpals reduced to two long bones. Fifth digit of pes rudimentary.

¹Gregory, H. E. 1917. 'Geology of the Navajo Country.' U. S. Geol. Survey, Prof. Paper 93.

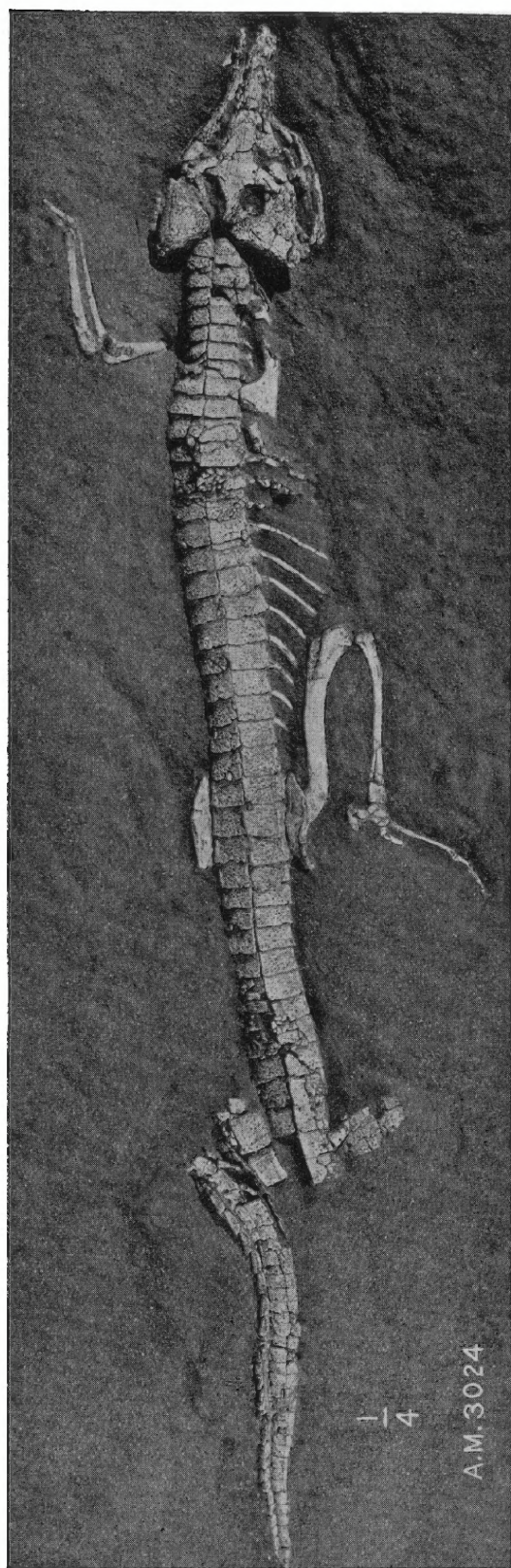


Fig. 1.—*Archaeosuchus richardsoni* (A. M. N. H. No. 3024). Dorsal view of skeleton in original matrix. One-fourth natural size.

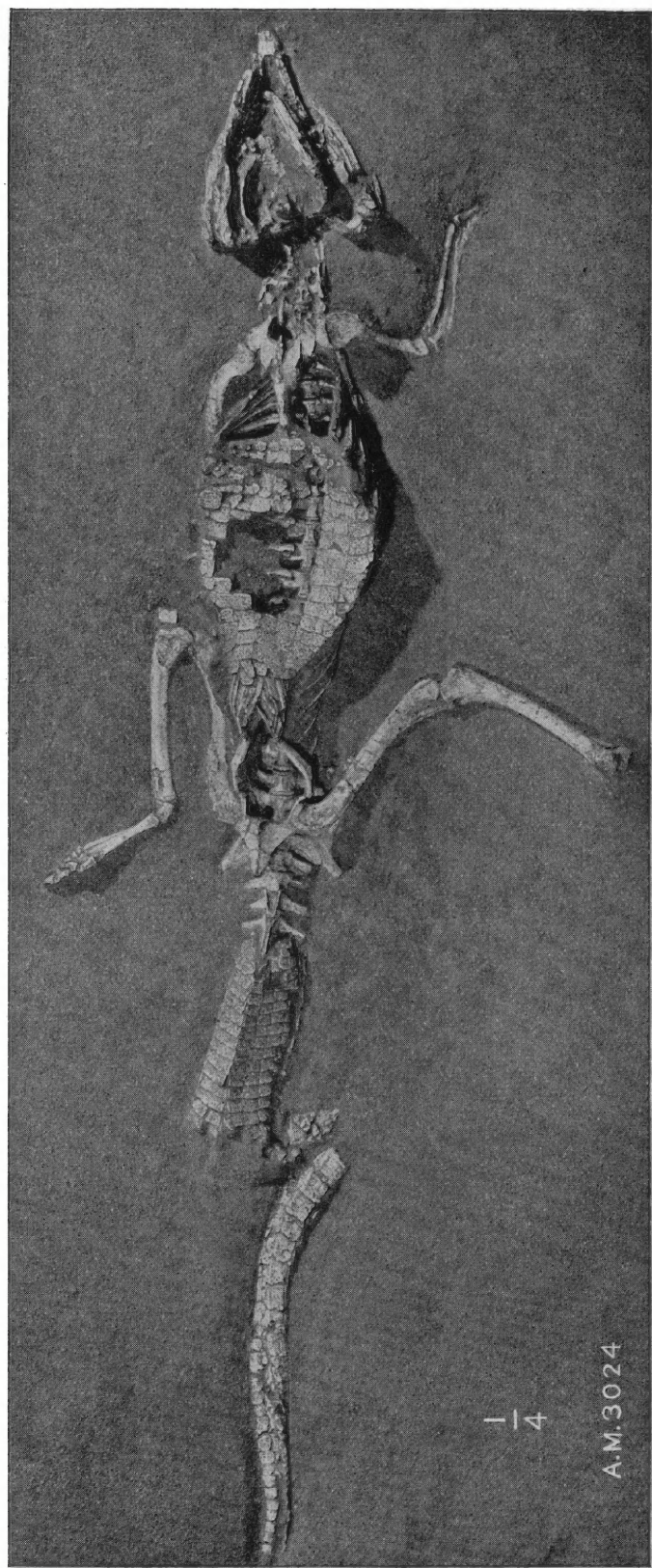


Fig. 2.—*Archaeosuchus richardsoni* (A. M. N. H. No. 3024). Ventral view of skeleton in original matrix. One-fourth natural size.

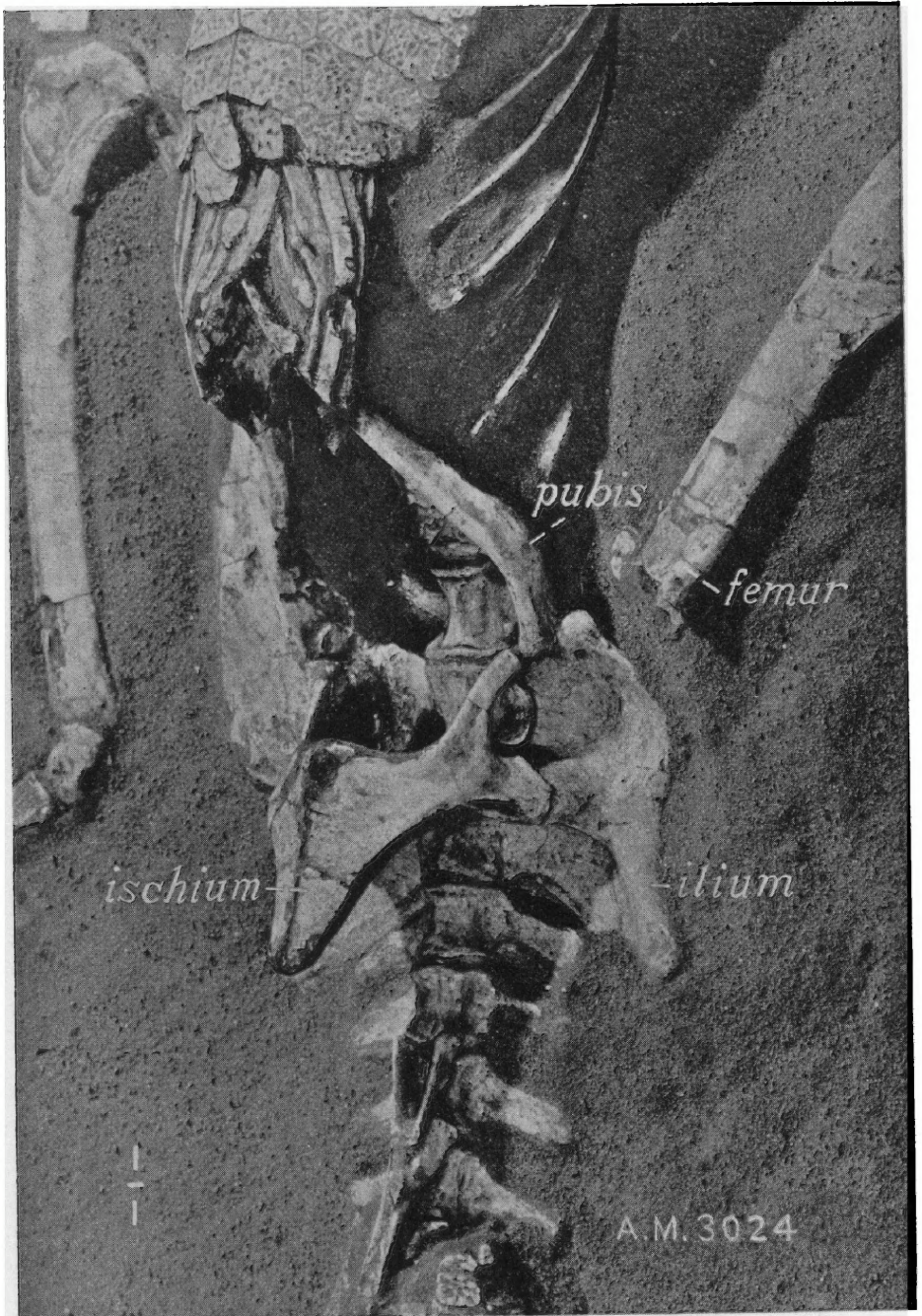


Fig. 3.—*Archaeosuchus richardsoni* (A. M. N. H. No. 3024). Proximal end of femur removed to show articulation of ilium, pubis, and ischium. Natural size.